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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,942	02/20/2004	Daniel Brinker	25432-00017	4788
33772	7590	05/16/2006		
MCDONALD HOPKINS CO., LPA 2100 BANK ONE CENTER 600 SUPERIOR AVENUE, E. CLEVELAND, OH 44114-2653			EXAMINER JIMENEZ, MARC QUEMUEL	
			ART UNIT	PAPER NUMBER
			3726	

DATE MAILED: 05/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/783,942	Applicant(s) BRINKER ET AL.	
	Examiner Marc Jimenez	Art Unit 3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 April 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 4-7, 11, 14, 16 and 20-33 is/are pending in the application.
- 4a) Of the above claim(s) 30-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4-7, 11, 14, 16 and 20-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Prosecution Reopened***

1. The indicated allowability of claims 4-7, 11, 14, 16 and 20-33 is withdrawn in view of the newly discovered reference(s) to Wossner (US4493231). Rejections based on the newly cited reference(s) follow.

### ***Specification***

2. The disclosure is objected to because of the following informalities:

In the first line of the specification, - - now patent number 6,708,589 - - should be inserted after 09/803,785. - - now patent number 6,485,109 - - should be inserted after 09/414,113.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claim 16** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 16 recites "said step of final finishing" which lacks proper antecedent basis.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. **Claims 20, 24 and 26** are rejected under 35 U.S.C. 102(b) as being anticipated by Wossner.

Wossner teaches a method of manufacturing a brake assembly, comprising: providing a knuckle **41**, a brake rotor **27**, and a hub **26**,

assembling the knuckle **41**, the brake rotor **27**, and the hub **26** together to form an assembly (as shown in figure 2, the knuckle, brake rotor, and hub are assembled together), fixing the assembly to a fixture **5** wherein the hub **26** is driven (by **24,9,11**) such that the hub **26** and the brake rotor **27** rotate (col. 3, lines 43-44) with respect to the knuckle **41**, and finishing (col. 2, line 13) at least one surface of the brake rotor **27** to reduce lateral run-out of the surface of the brake rotor **27**.

Regarding claims 20 and 26, the whole purpose of refacing a surface of a brake rotor is to smooth out and create unevenness. Therefore, there is parallism between the surface of the brake rotor and brake caliper ears and run-out is minimized.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 4-7, 14, 21, 25 and 27-29** are rejected under 35 U.S.C. 103(a) as being unpatentable over Wossner in view of Brinks (US5996454).

Regarding claims 21, 25 and 27, Wossner teaches the invention cited above with the exception of finishing to have a lateral run-out of less than 14micrometer.

Brinks teaches eliminating disc rotor run-out and zero out the stacked tolerances (col. 6, lines 51-54).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of Wossner with finishing to have a lateral run-out of less than 14micrometer, in light of the teachings of Brinks, in order to provide a smooth rotor surface that reduces vibration. Also, it would have been obvious to one of ordinary skill in the art at the time of the invention, to have used the claimed ranges, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Regarding claim 14, official notice is taken that it was well known to a person of ordinary skill in the art, at the time of the invention, to have finished the hub prior to securing the brake rotor to the assembly, in order to provide a smooth hub surface.

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Regarding claims 4-5, note the bearing retention feature in figure 2 above reference numeral **20** of Wossner.

Regarding claims 6-7, official notice is taken that it was well known to a person of ordinary skill in the art, at the time of the invention, to have provided a snap fit bearing in the bore of the knuckle, in order to provide a smooth rotating wheel.

Regarding claims 28 and 29, the whole purpose of refacing a surface of a brake rotor is to smooth out and create unevenness. Therefore, there is parallism between the surface of the brake rotor and brake caliper ears and run-out is minimized.

9. **Claim 16** is rejected under 35 U.S.C. 103(a) as being unpatentable over Wossner.

Wossner teaches the invention cited above with the exception of press fitting bolts in the holes. However, official notice is taken that it was well known to a person of ordinary skill in the art, at the time of the invention, to have provided a press fit joint, in order to securely fasten the bolts to the receiving holes.

10. **Claims 11, 22 and 23** are rejected under 35 U.S.C. 103(a) as being unpatentable over Wossner in view of Brinks as applied to claim 21 above, and further in view of Kopecko et al. (US4336730).

Wossner/Brinks teach the invention cited above with the exception of the hub comprising a flange portion.

Kopecko et al. teach a hub **5** comprising a flange portion (see figure 3).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the

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invention, to have provided the invention of Wossner/Brinks with a hub comprising a flange portion, in light of the teachings of Kopecko et al., in order to provide a hub that can be attached to different sized wheels.

Regarding claims 11 and 23, there are bolt 61 receiving holes.

***Response to Arguments***

11. Applicant's arguments with respect to claims 4-7, 11, 14, 16 and 20-29 have been considered but are moot in view of the new ground(s) of rejection.

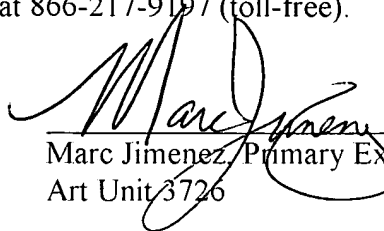
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc Jimenez whose telephone number is (571) 272-4530. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Marc Jimenez, Primary Examiner  
Art Unit 3726

MJ  
5-10-06